

10/540940
Rec'd PCT/PTO 23 JUN 2004

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
15 July 2004 (15.07.2004)

PCT

(10) International Publication Number
WO 2004/059301 A1

(51) International Patent Classification?: G01N 21/55, (74) Agents: FENSTER, Paul et al.; Fenster and Company G01J 3/30 Patent Attorneys LTD., P.O. Box 10256, 49002 Petach Tikva (IL).

(21) International Application Number:
PCT/IL2002/001037

(22) International Filing Date:
25 December 2002 (25.12.2002)

(25) Filing Language: English

(26) Publication Language: English

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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

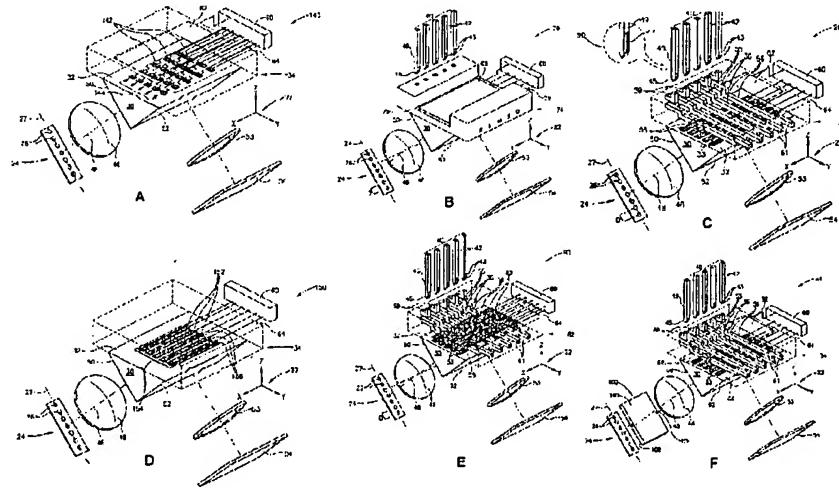
— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report

[Continued on next page]

(54) Title: SURFACE PLASMON RESONANCE SENSOR



(57) Abstract: An SPR sensor comprising: a thin conducting layer comprising at least one conductive element formed on a surface of a transparent substrate; an illumination system controllable to illuminate an interface between the conducting layer and the substrate; a photosensitive surface that generates signals responsive to light from the light source that is reflected from a region of the interface; a flow cell formed with at least one flow channel having a lumen defined by a wall at least a portion of which is formed from an elastic material and a portion of which is formed by a region of the conducting layer; and at least one hollow needle having an exit orifice communicating with the needle's lumen and wherein fluid flow is enabled between the flow channel and the needle's lumen by puncturing the elastic material with the at least one needle so that the exit orifice communicates with the flow channel lumen.

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